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2.8X0.8mm RIGHT ANGLE SMD CHIP LED LAMP

Part Number: AA2810ASESK Super Bright Orange

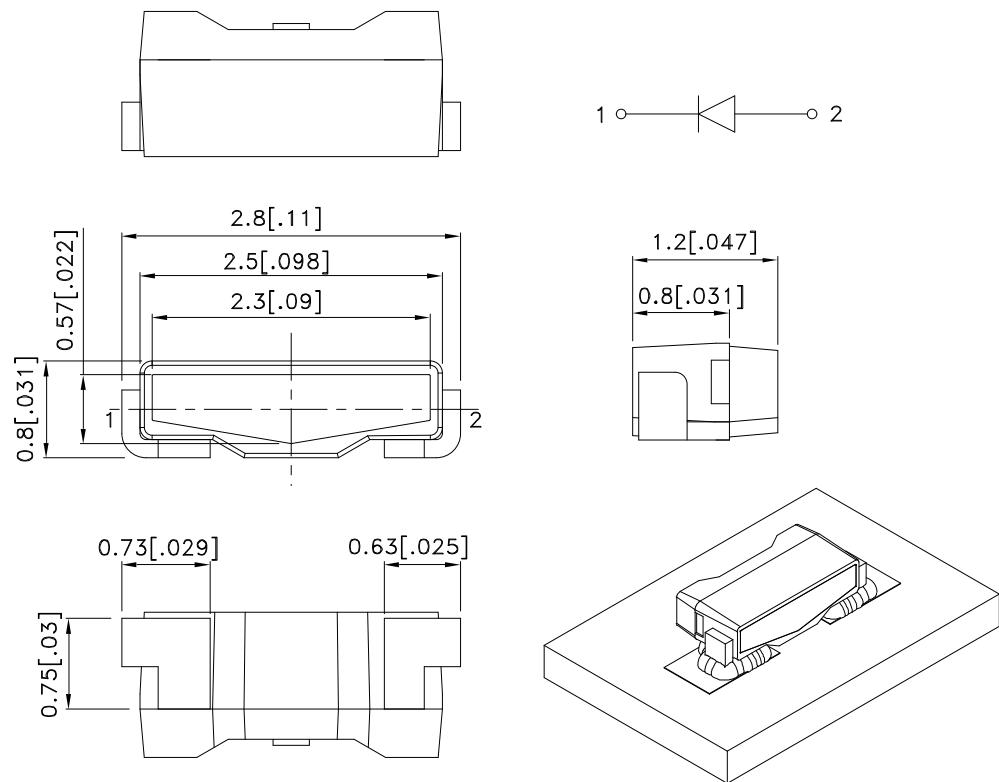
Features

- 2.8mmX0.8mm right angle SMT LED, 1.2mm thickness.
- Low power consumption.
- Ideal for backlight and indicator.
- Package : 2000pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

Description

The Super Bright Orange device is made with AlGaNp (on GaAs substrate) light emitting diode chip.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.1(0.0039")$ unless otherwise noted.
3. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.
4. The device has a single mounting surface. The device must be mounted according to the specifications.



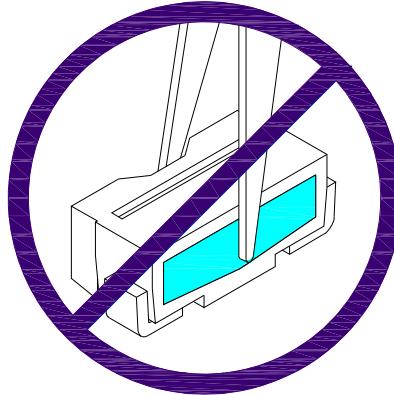
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Handling Precautions

Compare to epoxy encapsulant that is hard and brittle, silicone is softer and flexible. Although its characteristic significantly reduces thermal stress, it is more susceptible to damage by external mechanical force.

As a result, special handling precautions need to be observed during assembly using silicone encapsulated LED products. Failure to comply might lead to damage and premature failure of the LED.

1. Do not directly touch or handle the silicone lens surface. It may damage the internal circuitry.



2. As silicone encapsulation is permeable to gases, some corrosive substances such as H₂S might corrode silver plating of leadframe. Special care should be taken if an LED with silicone encapsulation is to be used near such substances.

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Selection Guide

Part No.	Dice	Lens Type	I _v (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Typ.	
AA2810ASESK	Super Bright Orange (AlGInP)	Water Clear	150	250	110°
			*120	*250	

Notes:

1. 01 / 2 is the angle from optical centerline where the luminous intensity is 1 / 2 of the optical peak value.

2. Luminous intensity / luminous Flux: + / -15%.

* Luminous intensity value is traceable to the CIE127-2007 compliant national standards.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Super Bright Orange	610		nm	I _f =20mA
λD [1]	Dominant Wavelength	Super Bright Orange	601		nm	I _f =20mA
Δλ1/2	Spectral Line Half-width	Super Bright Orange	29		nm	I _f =20mA
C	Capacitance	Super Bright Orange	15		pF	V _f =0V;f=1MHz
V _f [2]	Forward Voltage	Super Bright Orange	2.1	2.5	V	I _f =20mA
I _R	Reverse Current	Super Bright Orange		10	uA	V _R =5V

Notes:

1. Wavelength: + / -1nm.

2. Forward Voltage: + / -0.1V.

3. Wavelength value is traceable to the CIE127-2007 compliant national standards.

4. Excess driving current and / or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

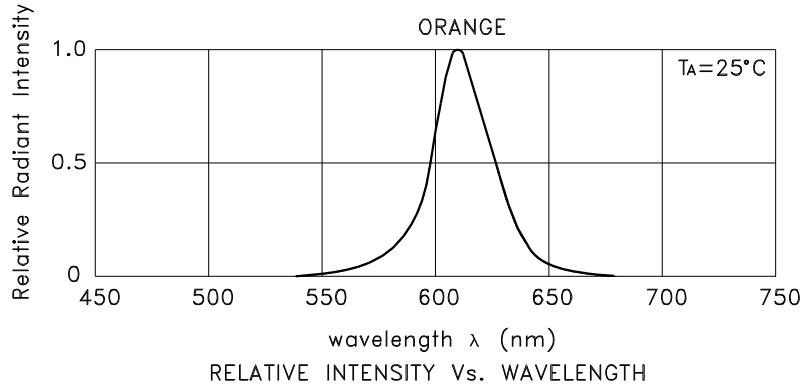
Absolute Maximum Ratings at TA=25°C

Parameter	Super Bright Orange	Units
Power dissipation	75	mW
DC Forward Current	30	mA
Peak Forward Current [1]	195	mA
Reverse Voltage	5	V
Operating Temperature	-40°C To +85°C	
Storage Temperature	-40°C To +85°C	

Note:

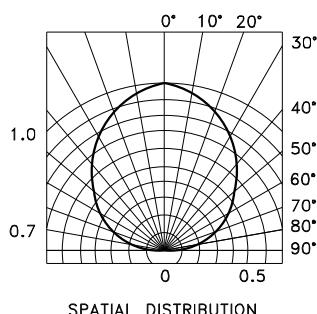
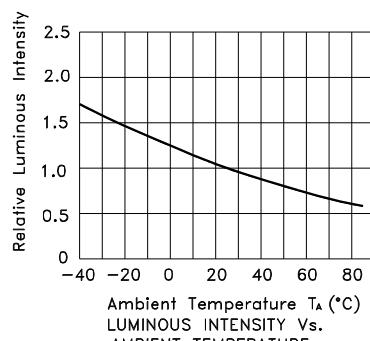
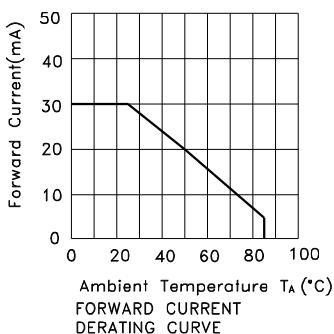
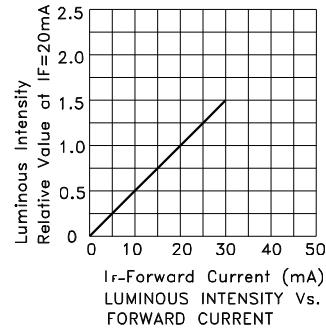
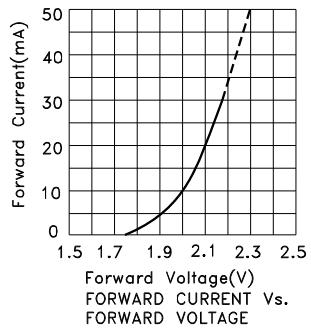
1. 1 / 10 Duty Cycle, 0.1ms Pulse Width.

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Super Bright Orange

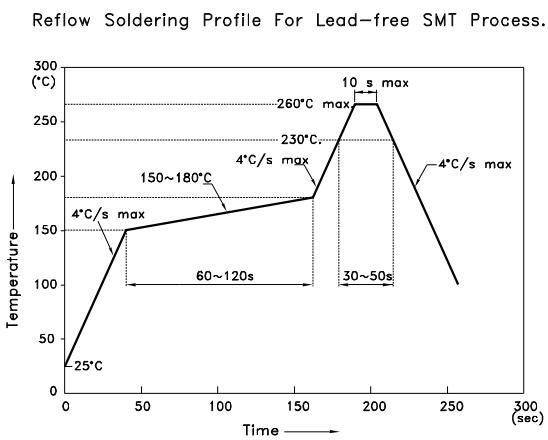
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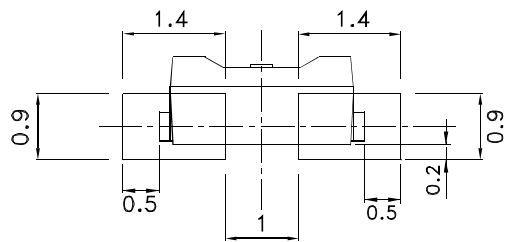
**Reflow soldering is recommended and the soldering profile is shown below.
Other soldering methods are not recommended as they might cause damage to the product.**



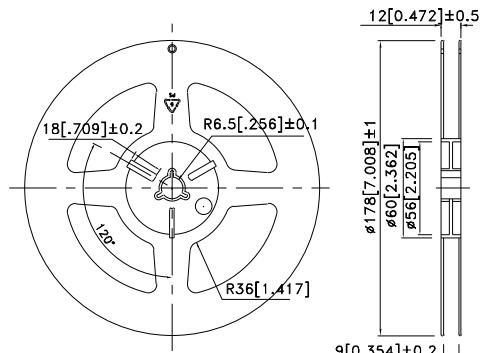
NOTES:

1. We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.
2. Don't cause stress to the epoxy resin while it is exposed to high temperature.
3. Number of reflow process shall be 2 times or less.

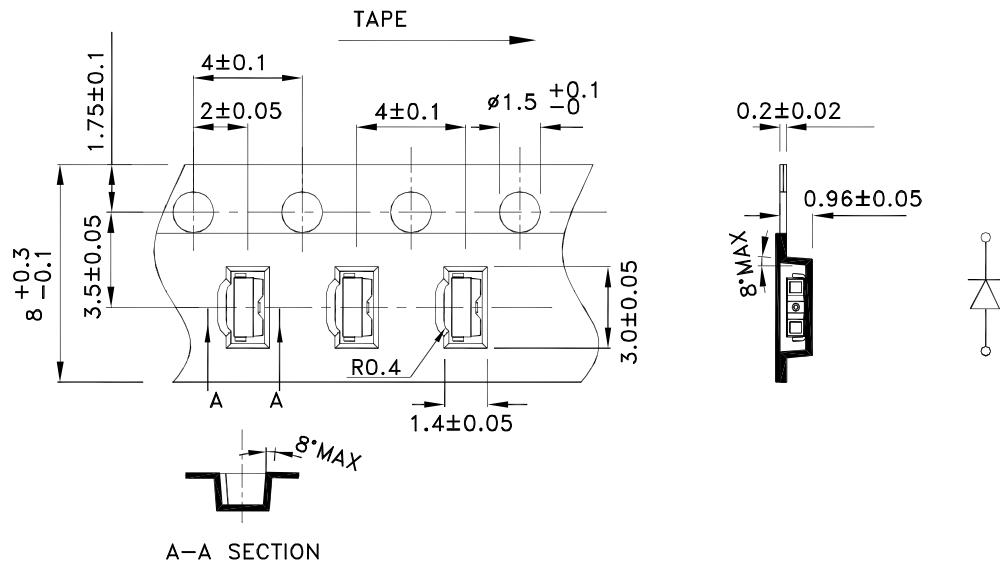
Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



Reel Dimension



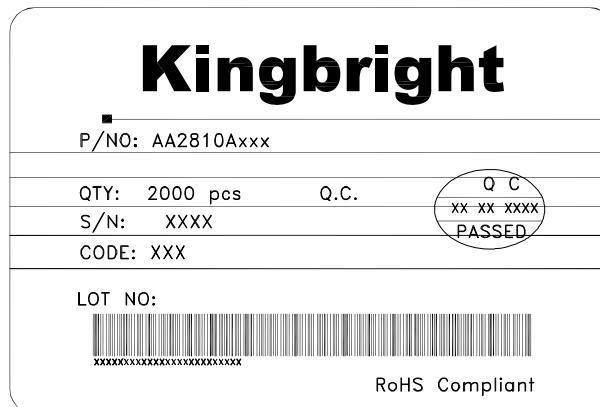
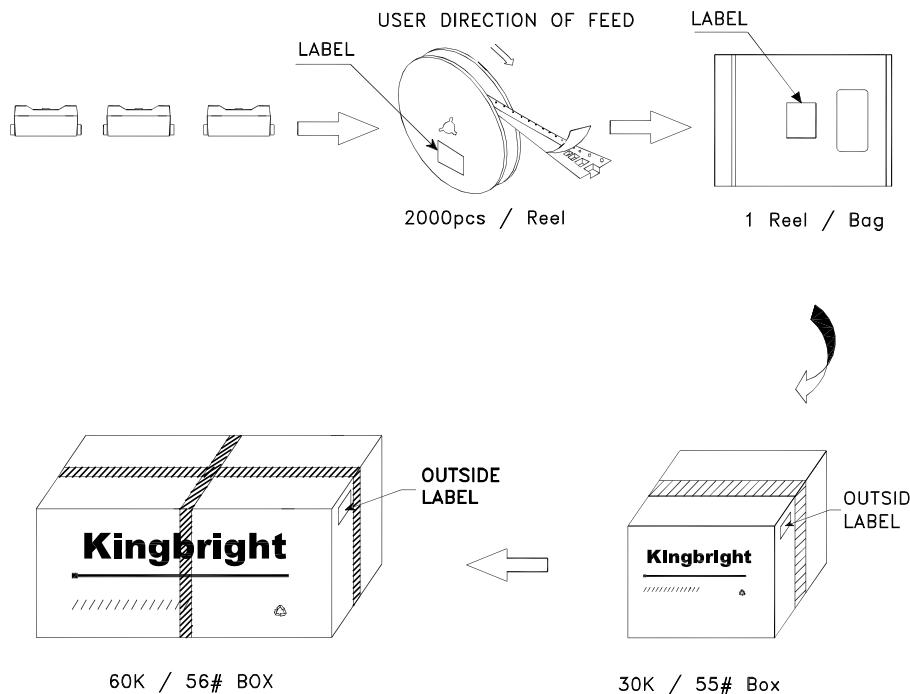
Tape Dimensions (Units : mm)



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PACKING & LABEL SPECIFICATIONS

AA2810ASESK



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